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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,432	07/21/2003	Kenji Niibori	03560.003335	4966

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EXAMINER	
RIELLEY, ELIZABETH A	
ART UNIT	**PAPER NUMBER**
2879	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EX

Office Action Summary	Application No.	Applicant(s)	
	10/622,432	NIIBORI ET AL.	
	Examiner	Art Unit	
	Elizabeth A. Rielley	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 July 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/30/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figure 17 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Fushimi et al (US 5936343).

5. In regard to claim 1, Fushimi et al ('343) teach a vacuum container (column 3 lines 29-44) having a first substrate (112; figure 3; column 8 line 10 – column 12 line 50; column 19 lines 5-16) and a second substrate (101) arranged so as to face each other as components comprising, within said vacuum container: a spacer (113) disposed at the first substrate (112 via 108, 109, and 110) or the second substrate (101) so as to maintain an interval between the first substrate and the second substrate, wherein said spacer is fixed within said vacuum container via a supporting member (105) provided at said spacer (113) without contacting the substrate (101 and 112) where said spacer is disposed.

6. In regard to claim 2, Fushimi et al ('343) teach the spacer (113) is fixed to the substrate (101) where said spacer is disposed, via the supporting member (105) provided at said spacer (113) without contacting the substrate (101) where said spacer is disposed (see figure 1).

7. In regard to claim 3, Fushimi et al ('343) teach the supporting member (105) is connected to the substrate (101) by means of a first connecting member (104; see figure 3).

8. In regard to claim 4, Fushimi et al ('343) teach the supporting member (105) is connected to the spacer (113) by means of a second connecting member (107).

9. In regard to claim 5, Fushimi et al ('343) teach a plurality of electron emission elements (102; figure 3; column 10 line 6) arranged on the first substrate (101); and an image display member (111) arranged on the second substrate (112; column 10 lines 16-17).

10. In regard to claim 6, Fushimi et al ('343) teach the spacer (113) is disposed on wires (105, 114; figure 1) for driving said plurality of electron emission elements (102) arranged on the first substrate (101; column 8 lines 26-27).

11. In regard to claim 7, Fushimi et al ('343) teach the supporting member (411; figure 4c) is disposed outside of an electron emission region ("Trajectory"; figure 4c; column 19 line 18-column 20 line 17).

12. Claims 8-12 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al (US 58119274).

13. In regard to claim 8, Anderson et al ('274) teaches a vacuum container (column 2 lines 9-14) having a first substrate (130; figure 8; column 7 line 61 to column 9 line 19) and a second substrate (164) arranged so as to face each other (see figure 8) as components comprising, within said vacuum container: a spacer (104) disposed at the first substrate or the second substrate so as to maintain an interval between the first substrate and the second substrate, wherein said spacer is fixed within said vacuum container via a supporting member (112) provided at said spacer with a gap (not numbered; figure 7; gap made from 112 in between 132 and 108) with the substrate (130) where said spacer is disposed.

14. In regard to claim 9, Anderson et al ('274) teaches that the spacer (104) is fixed to the substrate where said spacer is disposed (130), via the supporting member (112) provided at said spacer (104) with a gap (not numbered; figure 7; gap made from 112 in between 132 and 108) with the substrate (130) where said spacer is disposed.

15. In regard to claim 10, Anderson et al ('274) teaches the supporting member (112) is connected to the substrate (130) by means of a first connecting member (132; figure 7; column 6 line 43 to column 7 line 2).

16. In regard to claim 11, Anderson et al ("274) teaches the supporting member (112) is connected to the spacer (104) by means of a second connecting member (108; figure 8; column 6 line 43 to column 7 line 2).

17. In regard to claim 12, Anderson et al ('274) teaches electron emission elements (166; figure 8; column 8 lines 12-17) arranged on the first substrate (164); and an image display member (124) arranged on the second substrate (130).

18. In regard to claim 14, Anderson et al ('274) teaches the supporting member (114) is disposed outside of an electron emission region (column 3 lines 31-34; column 4 line 66 to column 5 line 3).

19. In regard to claim 15, Anderson et al ('274) teaches a method for manufacturing a vacuum container (column 2 lines 9-14; column 1 line 5-8) having a first substrate (130) and a second substrate (164) arranged so as to face each other as components (see figure 8; column 7 line 61 to column 9 line 19), and a spacer (104) disposed at the first substrate or the second substrate within the vacuum container, said method comprising the steps of: fixing a supporting member (112) on a surface other than a surface of disposition of the spacer with respect to the concerned substrate at both ends of the spacer with a distance from the surface of disposition; and disposing the spacer (104) where the supporting member is

fixed at the first substrate or the second substrate and fixing the supporting member (112) on the substrate (130) where the spacer (104) is disposed (see figure 8).

20. In regard to claim 16, Anderson et al ('274) teaches a method for manufacturing an image display apparatus having a vacuum container (column 2 lines 9-14; column 1 lines 6-8) having a first substrate (164) and a second substrate (130) arranged so as to face each other (see figure 8) as components, and a spacer (104), electron emission elements (166) on the first substrate (164), and an image display member (124) on the second substrate (130) that are disposed within the vacuum container, said method comprising the step of: manufacturing the vacuum container according to a method according to claim 15 (see above).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

22. Claims 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (US 5811927) in view of Fushimi et al (US 5936343).

23. In regard to claims 13 and 17, Anderson et al ('927) disclose all the limitations set forth as described above, except the spacer is disposed on wires for driving said plurality of electron emission elements arranged on the first substrate. Fushimi et al ('343) teaches that the spacer (113) is disposed on

wires (105, 114; figure 1) for driving said plurality of electron emission elements (102) arranged on the first substrate (101; column 8 lines 26-27) in order to provide a more secure electrical connection for the emission elements. Hence, it would have been obvious at the time of the invention to one of ordinary skill in the art to combine the field emitting device of Anderson et al ('927) with the arrangement of the spacer located on the connecting wires as taught by Fushimi et al ('343). Motivation would be to provide a more secure electrical connection for the emission elements.

Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Rielley whose telephone number is 571-272-2117. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elizabeth Rielley

Elizabeth Rielley

Examiner
Art Unit 2879

5/12/05
Mariceli Santiago
AU 2879